# GSM2400 Managed Modular Fast Ethernet/Gigabit Switch

# Model: GSM2400 Key Highlights

- Modular design allows you to customize ports to meet your unique LAN requirements
- Mix and match Fast Ethernet and Gigabit fiber and copper in the same chassis
- Module choices include Fast Ethernet and Gigabit in copper and singlemode or multimode fiber
- Management features include:
  - Access via web, Telnet or CLI
  - LLDP
  - SNMP
  - RMON
  - DHCP client
  - IGMP
  - 802.1x network security
  - QoS
  - VLANs
  - Port mirroring
  - Port trunking
  - Flow control
  - MAC address
  - Spanning Tree
  - TFTP firmware upgrade
- Plug and play installation allows you to add modules when you need them
- Significant cost savings when used in conjunction with Waters' classroom/ workgroup switches
- Backed by Waters' limited lifetime warranty

#### WATERS NETWORK SYSTEMS

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# GSM2400 Ethernet Switch Managed Modular Fiber and Copper Port Switching



GSM2400 with 8 port 1000Base-SX fiber module, 8 port 10/100/1000Base-TX RJ45 module and 8 port 100Base-FX module with SC connectors

**Waters Network Systems' GSM2400** modular design provides a flexible cost-savings solution for combining fiber and copper switch ports in a single chassis. The 2400M has the unique ability to mix and match 100Mbps and 1000Mbps fiber in the same chassis. The 2400M protects your existing 100Mbps FX drops and provides you with a cost effective path for easy migration to 1000Base-SX or LX.

**Flexibility** The 2400 is a fully managed chassis-based switch with three module slots. You can choose from a variety of 8-port module configurations supporting 10/100/1000Base-TX, 100Base-FX (multi or singlemode), and 1000Base-SX or LX. Maximum LAN flexibility is achieved by allowing you to customize the switch to meet your exact connectivity requirement.

#### **Features and Benefits**

- 802.1p Class of Service (QoS). Four priority levels are available to provide the ability to customize the treatment of specific classes of data for better control. The QoS function allows you to prioritize types of data such as voice and video. QoS provides a means to control attributes such as error rates, lost packet rates, throughput, and delay.
- 802.1x Access control for improved network security. The 2400 provides 802.1x which enables user authentication for each network access attempt. Port security allows you to limit the number of MAC addresses per port for better control. Static MAC addresses can be defined for each port to ensure only registered workstations are allowed access. By enabling both of these features, you can establish an access mechanism based on user and workstation identities, as well as control the number of access stations.
- 802.1q VLAN capability for performance and security. VLANs are used to isolate traffic between different users and thus provides better security. Limiting the broadcast traffic to within the same VLAN broadcast domain also enhances performance. The 2400M supports 802.1Q Tagged and Port VLANs with up to 256 groups.
- Supports ACL for L2/L3 Protocol Filtering, ingress rate limit and port copy
- 802.1d and 802.1w Spanning Tree and RSTP
- 802.3ad Port Trunking and Load Distribution
- Supports IP Multicasting and Snooping
- Supports Port Control for Ingress and Egress
- Supports SNMP, MIBs and RMON

# GSM2400 Managed Modular Ethernet Switch

#### **ORDERING INFORMATION**

Model	Description
Chassis	
GSM2400AC	Modular managed switch chassis with AC power input. Holds up to three modules.
GSM2400DC	Modular managed switch chassis with 48VDC power input. Holds up to three modules.
Modules	
2400-GTX	8-port 10/100/1000Base-TX RJ45 module
2400-8SFP	8-port 1000Base-X fiber module for 1000Base-SX or LX SFP modules
2400-4GTX4SFP	4-port 10/100/1000Base-TX RJ45 module and 4-port 1000Base-X SFP fiber module slots
2400-2GTX6FXSC	2-port 10/100/1000Base-TX RJ45 module and 6-port 100Base-FX MM fiber with SC connectors
2400-2GTX6FXST	2-port 10/100/1000Base-TX RJ45 module and 6-port 100Base-FX MM fiber with ST connectors
2400-2GTX6FXSC-20	2-port 10/100/1000Base-TX RJ45 module and 6-port 100Base-FX SM (20km) fiber with SC connectors
2400-8FXSC	8-port 100Base-FX MM fiber with SC connectors
2400-8FXST	8-port 100Base-FX MM fiber with ST connectors
2400-8FXSC-20	8-port 100Base-FX SM (20km) fiber with SC connectors
SFP Fiber Modules for GSM-2400	
SFP-1000SXLC	1 port 1000Base-SX MM fiber module with LC connector
SFP-1000LXLC-10	1 port 1000Base-LX SM (10km) fiber module with LC connector
SFP-1000LXLC-30	1 port 1000Base-LX SM (30km) fiber module with LC connector

#### **SPECIFICATIONS**

## **OPERATIONAL CHARACTERISTICS:**

MAC Address Table

▶ Up to 8K

Switching Mode

▶ Store-and-forward

Memory Buffer Size

▶ Jumbo frame support

#### **MANAGEMENT FUNCTIONS:**

- ▶ Web-based, Console and SNMP
- ▶ Link Laver Discovery Protocol (LDP) support
- Port setting for duplex and speed
- ▶ Port trunking (up to 12 groups)
- ▶ Port and tagged VLANs
- Port mirroring
- **DHCP**
- ▶ IGMP snooping
- ▶ IP MAC port binding
- Auto MAC address learning and aging
- ▶ Static MAC filtering
- ▶ 802.1x access control
- ▶ Storm control for UC, MC and BC
- QoS Control List (4 priorities)
- ▶ Bandwidth control
- QoS
- **LACP**
- ▶ RSTP
- ACL
- ▶ SSH v2 and HTTPS management
- ▶ RFC1213MIB (MIB-II)
- ▶ RFC4188 Bridge MIB
- ▶ RFC3635 Ether-like MIB
- ▶ RFC2933 IGMP MIB
- ▶ SNMP v1/v2c Agent

#### **NETWORK STANDARDS:**

- ▶ IEEE 802.3
- ▶ IEEE 802.3u
- ▶ IEEE 802.3ab
- ▶ IEEE 802.3z
- ▶ IEEE 802.3x
- ▶ IEEE 802.1ab
- ▶ IEEE 802.1q
- ▶ IEEE 802.1p
- ▶ IEEE 802.1d/w
- ▶ IEEE 802.1x
- ▶ IEEE 802.1s
- ▶ IEEE 803.ad

# **EMI/SAFETY COMPLIANCE:**

FCC Class A, CE Mark Class A IEC60950-1 safety

## **NETWORK CABLE CONNECTORS:**

RJ45 shielded female ports

- ▶ 10/100/1000Mbps: CAT5 UTP or better
- ▶ Multimode or singlemode with SC, ST or LC connectors

### **POWER SUPPLY:**

AC Input Voltage

▶ 100-240 VAC, 50/60Hz

Power Consumption

▶ 25 watts

DC Input Voltage

- Screw type terminal block
- ▶ +6 ~ 57VDC

Power Consumption

▶ 25 watts

#### **OPERATING ENVIRONMENT:**

**Ambient Temperature** 

> 23° to 122°F (-5° to 50°C)

Storage

-4° to 185°F (20° to 85°C)

Ambient relative humidity

▶ 10% to 90% (non-condensing)

### **MECHANICAL:**

Enclosure:

- ▶ Rugged high-strength sheet metal suitable for stand-alone or rack-mounting
- ▶ Cooling Method: Fan cooled

#### PHYSICAL CHARACTERISTICS:

Dimensions

- ▶ 17.44" W x 9.6" D x 1.7" H
- ▶ 443mm x 245mm x 43mm

- Switch Chassis: 5.74 lbs (2.6 kg)
- Module: 0.5 lbs (240g)

#### WARRANTY:

Limited Lifetime

Made in USA